

Persistant Launch Range Surveillance, Phase I

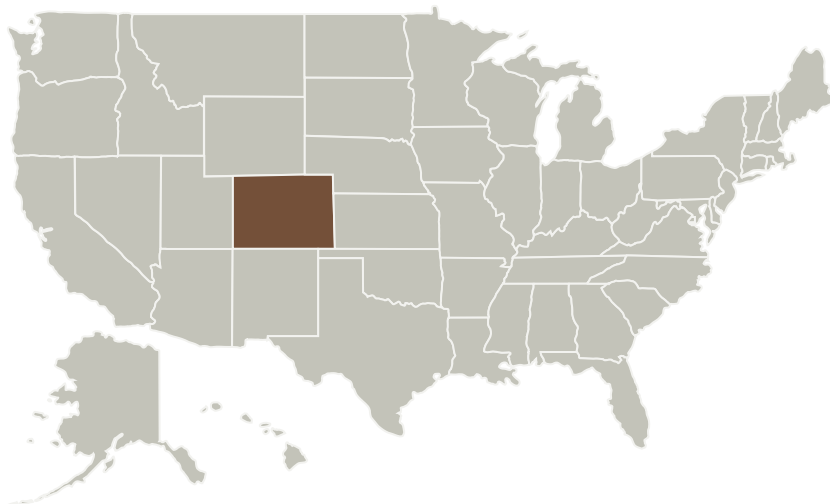
Completed Technology Project (2007 - 2008)



Project Introduction

Launch site infrastructure and space vehicle assets represent multi-billion dollar investments that must be protected. Additionally, personnel and equipment must be protected against the hazards of launch operations. PercepTek's approach to the launch site surveillance and security problem will enable multiple platforms and sensing modalities to support detection, classification, tracking, and unmanned system response. Our comprehensive system approach to launch site surveillance and security provides support for heterogeneous assets involved in security functions with a focus on the Aerostat platform. An Aerostat platform will be outfitted with GMTI radar to provide wide area coverage and an EO/IR sensor pod for high resolution video detection and tracking. Phase I will result in a detailed set of design reference scenarios tailored to the surveillance and security problem, identification of system level elements necessary to address the needs of launch site security, a system architecture design based on the Autonomous Collaborative Operations autonomy architecture, and a feasibility demonstration of key technology components that would be installed on an Aerostat platform. Phase II will result in a fieldable prototype surveillance and security system utilizing an outfitted Aerostat platform. At the completion of the Phase I activities, component technologies will be at a TRL-4 level.

Primary U.S. Work Locations and Key Partners



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Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

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Organizations Performing Work	Role	Type	Location
Perceptek	Supporting Organization	Industry	Littleton, Colorado

Primary U.S. Work Locations

Colorado

Project Management (cont.)

Program Manager:

Carlos Torrez

Technology Areas

Primary:

- TX16 Air Traffic Management and Range Tracking Systems
 - └ TX16.5 Range Tracking, Surveillance, and Flight Safety Technologies